TO: Acting Deputy Assistant Secretary for Grants and

Acquistion Management, Office of the Secretary

FROM: Acting Director

Office of Public Health

SUBJECT: FY 2002 Energy Report

I am responding to the September 25 memorandum from Mr. Marc Weisman, Acting Deputy Assistant Secretary for Grants and Acquisition Management, requesting the FY 2002 Energy Report.

These reports are being sent electronically to Mr. Scott Waldman, Department of Health and Human Services Energy Officer, per instructions in your guidance. The reports are organized in the following manner:

- A. OPDIV Annual Energy Report
- B. FY 2002 OPDIV Energy Management Data Report
- C. FY 2002 OPDIV Energy Scorecard
- D. OPDIV Implementation Plan

If you have any questions regarding the reports, please call CAPT Paul S. Fardig, P.E., Office of Environmental Health and Engineering, on (301)443-8027.

Gary J. Hartz Assistant Surgeon General

cc: IHS/OEHE

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## **FY 2002 Annual Energy Narrative Report**

## I. Management and Administration

- A. Energy Management Infrastructure
  - 1. Senior Agency Official: The senior Agency Official is Paul Fardig, Director, Division of Facilities Operations. This person supervises the Agency's Energy Coordinator.
  - 2. The Agency Energy Team consists of 12 Area Offices (Aberdeen, Albuquerque, Alaska, Bemidji, Billings, California, Nashville, Navajo, Oklahoma, Portland, Phoenix, Tucson) and 2 Regional Offices (Engineering Service (ES) in Dallas and Seattle). The 12 Area Offices and 2 Engineering Services Offices each have a designated Energy Coordinator who is supervised by the Area Facility Engineers or ES Directors. This team consists of

area_name	Energy Coordinator
HQE	Adam Scully
Nashville	George Styer
Bemidji	Ken Olson
Aberdeen	Rodney Vyff
Billings	Gary McFarland
Oklahoma City	Ken McKenzie
ES Dallas	Suresh Shah
Phoenix	Eugene Price
Tucson	Bob Drummond
Navajo	Richard Wermers
Albuquerque	Deanne Waconda
California	Kerry Gragg
Portland	Heidi Feigenbaum
ES Seattle	John Rogers
Anchorage	Gary Kuhn

The Area Facility Engineers report to their respective Area chain-of-command, which does not include Paul Fardig, Director, Division of Facilities Operations. For this reason, Paul Fardig and his staff can make recommendations to the Areas but cannot require that the Areas conform to an Agency-wide process or an Agency-wide contract. The Headquarters' role is to provide technical and administrative support, but the day-to-day project management and oversight of the facilities is the responsibility of the Area Facility Engineers. The IHS agency does not have a full time energy coordinator but instead relies on Area Facility Engineers who are responsible for collecting data and managing energy related activities. The Area Facility Engineers work with their respective local facility managers and their Area and ES project officers.

#### **B.** Management Tools

1. Awards: Describe the Area's use of employee incentive programs to reward exceptional performance in implementing Executive Order 13123.

The following received the DHHS and DOE Energy Awards:

Janice K. Moyer, Service Unit Director and Richard Brisbois, Facility Manager.

Janice Moyer is the Service Unit Director and Richard Brisbois works in maintenance at the IHS David C. Wynecoop Memorial Clinic in Wellpinit, Washington. These two individuals have combined efforts to implement highly successful energy management practices with limited personnel and operational resources. Over the past eight years, their work has resulted in an overall energy consumption reduction per gross square foot of 66 percent in the 25-year old, 12,250 square foot health clinic. These results are further validated by the fact that when compared to data from the Energy Information Association, the clinic uses two to three times less energy than the national average for buildings of similar type and function.

Lieutenant Commander, Dale M. Mossefin, P.E., Consulting Engineer, IHS Portland Area Office. LCDR Dale Mossefin manages the IHS Portland Area Office Energy Conservation Management Program. LCDR Mossefin's efforts have exceeded the Federally mandated 25 percent energy reduction by 2010. In FY 2001, he implemented the following energy conservation projects; a "hands-on" 3-day energy efficiency training seminar in conjunction with Washington State University; an extensive direct digital control project for two IHS health care facilities; a major HVAC equipment renovation to an IHS facility; a large health clinic expansion that incorporated energy and water efficiency technologies; and an HVAC comprehensive audit to another IHS site to investigate alternative designs and improvements. LCDR Mossefin's motto "each dollar saved in energy is another dollar available for IHS health care services," exemplifies his commitment to energy and water efficiency.

The following received the DHHS Energy Award:

Commander Adam T. Scully, P.E., IHS Energy Coordinator. Mr. Scully has tremendously simplified the energy reporting process for IHS energy personnel by developing a state-of-the-art client-server application. All of the required reports, including the Annual Energy Consumption Data, the Status of the Comprehensive Energy Surveys, and the Narrative and Implementation Reports, can be entered and submitted using an easy, point-and-click Windows interface that is a component of the IHS Real Property Database

Albuquerque -- Except for individual awards and recognition, there is no specific energy incentive program to reward exceptional performance in implementing the provisions of Executive Order 13123. The Annual Area Director's Awards Program was used to recognize an individual who was instrumental in improving energy efficiency at the Zuni Service Unit. In addition, Certificates of Appreciation were given to all health facilities staff during the Area Workshop, not only for energy projects but overall performance.

Billings -- There are no awards provided by the Billings Area Office, however, we are looking into the feasibility of using Utility Dollars to purchase equipment such as new drills for those Service Units that show a decrease in energy consumption and use this as an incentive/reward.

Portland -- On-the-spot awards have been provided to Service Unit employees who have implemented and demonstrated successful energy management policies and practice. Personnel are also nominated for national recognition for outstanding contributions in conserving energy (One such nomination was made in FY2001).

2. Performance Evaluations: Describe Area's efforts to include successful implementation of the requirements of Executive Order 13123 concerning the position descriptions and performance evaluations of senior energy officials, members of the OPDIV energy team, heads of field offices, and energy managers.

- Headquarters will work with the Areas to encourage the inclusion of energy efficiency measurements in the position descriptions and performance evaluations for all energy coordinators.
- Aberdeen -- The Area Office Mechanical Engineer is responsible for energy management activities as stated in his job description and it is part of his annual performance evaluation.
- Albuquerque -- Position descriptions and performance evaluations of those implementing the Executive Order do not specifically address energy efficiency, water conservation, or solar and other renewable energy projects. However, such actions are noted in performance evaluations since they are normal to the positions.
- Tucson -- Energy conservation elements are included in the position descriptions for facility managers.
- 3. Training Education: Describe activities undertaken to ensure that all appropriate personnel receive training for energy management requirements. Describe Area outreach programs that include education, training, and promotion of Energy Star® and other energy efficient products for Federal purchase card users. Highlight specific training courses attended by Area personnel.
- Alaska -- ANTHC provides energy management and conservation training to staff engineers. ANTHC engineers participate in energy conservation seminars and workshops. Energy conservation elements of HVAC and DDC systems are also covered at these seminars and workshops. Headquarters staff have trained facility managers and service unit staff on energy awareness. The FEMP energy awareness publications and information is channeled to the RHO Facility Managers for energy awareness. On-site energy training is conducte for FM and Staff at the regional hospitals.
- Albuquerque -- Energy management topics are included in the agenda during the annual OEHE workshop. Additionally, each service unit has identified their specific training needs and have attended appropriate courses through various vendors.
- Billings -- Training is available to all service unit facilities staff for the control and operation of building HVAC systems. The Billings Area utilizes direct digital control for all of its larger facilities. Control system training that incorporates better energy management is provided to facility managers.
- Oklahoma City -- In October of 2001, an Area Office engineer attended a Skills Update for Certified Energy Managers where they presented information regarding the latest energy efficient technology. On October 30, 2001, an Area Office engineer attended the mechanical and lighting portions of a live satellite broadcast of ASHRAE Standard 90.1-1999 which is the Energy Standard for Buildings Except Low-Rise Residential. The broadcast was sponsored by DOE, ASHRAE and IES.
- Tucson -- Training needs are re-assessed continually and training plans submitted annually. Specific courses included HVAC, air conditioning, appliance, and furnace servicing.
- 4. Showcase Facilities: Highlight exemplary new or existing facilities that HHS should consider for DOE Federal Energy Saver Showcase Facilities in FY 2003. Describe why the facilities should be considered Showcase Facilities (i.e., discuss the facility design, the improvements made in energy or water efficiency, the use of renewable energy, etc.).
- Billings -- The Blackfeet Hospital was recently awarded EPA's 2002 Energy Star Label.

Nashville -- Extensive energy improvement projects have been conducted at the Nashville Area hospitals. Cherokee Hospital now has additional insulation installed on the roof and stone fascia areas of building. HVAC systems have been refurbished to improve efficiency and are controlled by DDC systems. At Choctaw Health Center a new white single-ply membrane roof was installed with six inches of insulation. New double glazed windows with sun screening were also installed. All rooftop mounted A/C units were replaced with highly efficient units.

Oklahoma City -- A new health center is being constructed by the Pawnee Nation that has utilizes a geothermal loop system and exhaust fans with energy recovery coils.

## II. Energy Efficiency Performance

- A. Energy Reduction Performance:
  - 1. IHS uses Btu-per-gross-square-foot (Btu/GSF) as a broad indicator of energy efficiency in measuring performance toward the goals for Energy-Intensive facilities and Standard facilities.

The 2002 reported floor space rose from 6,394,000 in 2001 to 6,477,000 gross square feet and correspondently the energy consumption rose from 1,325,672 to 1,345,441 million Btus. Thus, the energy rate did not change much rising less than 0.2 percent from 207,333 Btu/GSF in 2001 to 207,700 Btu/GSF in 2002. The energy rate has reduced 15 percent compared to the 1990 baseline of 244,378 Btu/GSF (5,964,788 gross square feet, 1,457,661 million Btus).

#### **B.** Renewable Energy:

1. Self-Generated Renewable Energy: Identify/estimate energy use (in BBtu) from electricity self-generated from renewable sources (photovoltaics, wind) and renewable energy thermal projects (solar thermal, geothermal).

Albuquerque -- The Santa Fe and ACL hospitals both continue to utilize solar energy collection systems.

Nashville -- The Nashville Area hospitals have solar collection systems that reduce heating costs of the facilities. When the systems are fully functional, they reduce energy usage up to 10 percent.

	Consumption Units	Total Annual Energy	Energy Used by Agency*
Electricity from Renewables	kWH	134,741.0	9.6

2. Purchased Renewable Energy: Identify the renewable (i.e., wind, solar, geothermal, biomass) energy component of power purchases under competitive contract in megawatt-hours.

No information to report.

C. Petroleum. Identify petroleum-based fuels (fuel oil, LPG/propane) used in buildings in FY1990 and in FY 2002 and the percentage change from the baseline year.

							LPG Prop
		Oil 1000	Oil Cost in	NG 1000	NG Cost in	LPG Prop	Cost in
Year	GSF	Gal	1000s	CuFt	1000s	1000 Gal	1000s
1990	5,964,788	1,201	\$1,243.81	706,075	\$1,757.00	1,444	\$754.55

2002 6,	477,805	1,290 \$1,651.88	578,544 \$2,077.85	1,155	\$820.42
Percent Change	9	7	-18	-20	

D. Water Conservation. Identify/estimate water consumption and cost by OPDIV in FY 2002 and outline any OPDIV-specific issues related to collection of water consumption data.

	Consumption Units	Annual Consumption	Annual Cost (Thou. \$)
Water	Million Gal.	138.0	\$361.0

Bemidji -- water softener units were installed that utilized reduced volume regeneration cycles.

Portland -- The Portland Area Office provides service units with technical support to improve water efficiency.

Tucson -- Amount of water spent maintaining landscaping is decreasing through more efficient use. Replacement of irrigation system with lower usage system will be accomplished when funding becomes available. Amount of landscaping to be maintained will decrease when proposed replacement facilities come on line.

## III. Implementation Strategies

A. Life-Cycle Cost Analysis. Outline procedures in place to ensure the use of life-cycle cost analysis in making investment decisions about in products, services, construction, and other projects to lower the Federal Government's costs and to reduce energy and water consumption. Highlight examples where life cycle cost analysis was used in capital budgeting decisions concerning energy efficiency. Report on the successes and challenges of implementing life-cycle cost effective projects. (Under EPACT, energy conservation projects that will pay back investment costs within 10 years must be undertaken.)

Aberdeen -- The ESPC contract with Johnson Controls Inc. included a life cycle cost analysis for energy conservation opportunities at all 17 Aberdeen Area facilities. The contract was implemented at nine locations that were determined to be cost effective for the payback time.

Alaska -- Life Cycle Cost Analysis is required of all energy projects submitted to the AHFAC for funding consideration. Six hospital energy audits were conducted during FY 2001 and will be completed first quarter of FY 2002.

Bemidji -- Life-cycle cost analysis is required for all contract services and for government procurement of products, services, construction, and other projects to lower energy and water consumption.

Billings – Life-Cycle Cost Analysis is performed on as-need basis with an ROI greater than 1 as a baseline.

Nashville -- Life-Cycle Cost Analysis can determine the priority of energy projects. The shorter the pay back period the more attractive the project becomes. Most projects that we have funded provide pay back within five years.

- Oklahoma City -- A study was performed at the Claremore Indian Hospital to determine the mechanical system requirements for the building versus what the current systems can provide. System upgrade options were presented and evaluated. The "best" solution was chosen based on life-cycle analyses. We will be replacing the cooling tower, chillers, and pumps in early FY-2003.
- Portland -- Life cycle cost analysis is done on large projects to assure 10-years paybacks are anticipated. For energy conservation projects (less than \$25,000), technologies with proven paybacks (Energy Star products) are used to assure energy efficiency.
- Tucson -- Life-cycle cost analysis included in building procurement documents. Energy efficiency and maintenance cost estimates are considered when procuring equipment.
- **B. Facility Energy Audits:** Based on the following IHS Energy Audit Report (see table below), the IHS conducted energy audits on 4,418,000 GSF of Facilities space since 1992, representing 68 percent of total space. In 2002, the IHS conducted audits on 1,009,489 GSF of Facilities space, representing 15 percent of total space.

						Next Energy Audit	Last Energy Audit	Energy Audit	
area	state	Owner	city_town	inst_no	inst_name	Year	Year	Team	GSF
AB	ND	Govt	BELCOURT		QUENTIN N BURDICK MEMORIAL HOS	2013		SDStateUniv	199,865
AB	SD	Govt	EAGLE BUTTE	13170	PHS Indian Hospital	2002	1982	ROFEC VIII	79,635
AB	SD	Govt	FORT THOMPSON	16180	PHS Indian Health Center	2006	1995	SDStateUniv	35,114
AB	ND	Govt	FORT TOTTEN	11523	PHS Indian Health Center	2010			22,712
AB	ND	Govt	FORT YATES	11524	PHS Indian Hospital	2005	1995	SDStateUniv	93,332
AB	SD	Govt	KYLE	12669	PHS Indian Health Center	2009	1995	SDStateUniv	47,202
AB	SD	Govt	LOWER BRULE	20608	PHS Indian Health Center	2006			19,030
AB	SD	Govt	MCLAUGHLIN	15386	PHS Indian Health Center	2004		ROFEC- DENVER	19,229
AB	ND	Govt	NEW TOWN	11525	PHS Indian Health Center	2008	1995	SDStateUniv	35,861
AB	SD	Govt	PINE RIDGE	11545	PHS Institutional Support Fac		1995	SDStateUniv	298,177
AB	SD	Govt	PINE RIDGE	41235	PHS Indian Hospital	2012			201,705
AB	SD	Govt	RAPID CITY	11546	PHS Indian Hospital	2015	1982	ROFEC VIII	192,935
AB	SD	Govt	RED SCAFFOLD	13509	PHS Indian Health Station		1982	ROFEC VIII	960
AB	SD	Govt	ROSEBUD	41237	PHS Indian Hospital	2014			197,584
AB	SD	Govt	SISSETON	11548	PHS Indian Hospital	2017	1995	SDStateUniv	47,626

AB	SD	Govt	WAGNER	11549	PHS Indian Health Center	2007	1995	SDStateUniv	45,110
AB	SD	Govt	WAKPALA	41236	ABERDEEN AREA YRTC	2011			25,749
AB	SD	Govt	WANBLEE	13508	PHS Indian Health Center	2003	1983	ROFEC VIII	23,839
AB	NE	Govt	WINNEBAGO	11506	PHS Indian Hospital	2016		ES-S contractor: Sys-Tek, P.A.	52,896
AB	SD	Govt	MCLAUGHLIN	03302	DENTAL CLINIC		1995	SDStateUniv	
AK	AK	Govt	ANCHORAGE	37561	PHS Indian Medical Center	2007	2002	NA EMCOR & ANTHC	384,272
AK	AK	Govt	ANIAK	30555	ANIAK HEALTH CTR	1999			1,288
AK	AK	Govt	BARROW	61087	PHS Indian Hospital	2007	2002	NA EMCOR & ANTHC	112,400
AK	AK	Govt	BETHEL	61088	PHS Indian Hospital	2007	2002		261,009
AK	AK	Govt	DILLINGHAM	61093	Kanakanak IHS Hospital	2006		PDC Inc & ANTHC	135,204
AK	AK	Govt	GAMBELL	61090	PHS Indian Health Station	1998			1,048
AK	AK	Govt	KOTZEBUE	41231	ALASKA NATIVE HOSPITAL	2005	2000	RSA Eng. & ANTHC	82,411
AK	AK	Govt	KOTZEBUE	61094	Kotzebue Older Qtrs		1980	ROFEC-X, CON	70,887
AK	AK	Govt	MT EDGECUMBE (SITKA)	61092	PHS Indian Hospital	2007	2002	PDC,Inc. & ANTHC	212,715
AK	AK	Govt	NOORVIK	30554	PHS Indian Health Station	2005			884
AK	AK	Govt	SAVOONGA	61096	PHS Indian Health Station	1998			884
AK	AK	Govt	SELAWIK	30064	PHS Indian Health Station	2005			884
AK	AK	Tribe	FORT YUKON	AK007	YUKON FLATS HEALTH CTR	1998			5,920
					NORTON SOUND REGIONAL				
AK	AK	Tribe	NOME	AK017	HOSPITAL PHS Indian	2007	2000		78,245
AQ	NM	Govt	ALBUQUERQUE	11508	Hospital PHS Indian Health	2004	1981	A/E Contractor	78,868
AQ	NM	Govt	LAGUNA	11982	Station	2007	1997	A/E Contractor	6,628
AQ	NM	Govt	MESCALERO	11514	PHS Indian Hospital	2007	1997	A/E Contractor	40,808
AQ	NM	Govt	SAN FIDEL	33115	PHS Indian Hospital	2007	1997	A/E Contractor	111,615
AQ	NM	Govt	SAN FIDEL	37562	NEW SUNRISE REG TREATMENT CTR	2007	1997	A/E Contractor	15,224
AQ	NM	Govt	SANTA FE	11516	PHS Indian Hospital	2007	1997	A/E Contractor	103,114
AQ	NM	Govt		41228	PHS Indian Health Center	2007		A/E Contractor	19,981

AQ	NM	Govt	ZUNI	11520	PHS Indian Hospital	2007	1997	A/E Contractor	106,900
AQ	NM	Tribe	COCHITI PUEBLO	AQ044	COCHITI HEALTH STATION		1997		638
AQ	NM	Tribe	SANTA CLARA PUEBLO	AQ036	SANTA CLARA CHR STATION		1997		586
BE	MN	Govt	CASS LAKE	11494	PHS Indian Hospital	1997	1994	Martell&Asso	57,874
BE	MN	Govt	NAYTAHWAUSH	11496	PHS Indian Health Center	1998			6,145
BE	MN	Govt	PONEMAH	12664	PHS Indian Health Center	1999	1994	Martell&Asso	6,492
BE	MN	Govt	PONSFORD	11497	PHS Indian Health Center	1998			3,110
BE	MN	Govt	RED LAKE	11498	CHIEF LEADING FEATHER HOSPITAL	1999	1994	Martell&Asso	82,902
DE	N 4 N I	Court		11100	PHS Institutional	1000			00.704
BE	MN	Govt	WHITE EARTH	11499	Support Fac PHS Indian Health	1998			62,704
ВІ	WY	Govt	ARAPAHOE	16181	Center	2003			17,407
ВІ	MT	Govt	BROWNING	11501	PHS Indian Hospital	2008	2001	DOE	260,060
ВІ	MT	Govt	CROW AGENCY	11502	PHS Indian Hospital	2003	1982	ROFEC	164,353
ВІ	WY	Govt	FORT WASHAKIE	11556	PHS Institutional Support Fac	2003	1994	Eng Services	31,489
ВІ	МТ	Govt	HARLEM	11503	PHS Indian Hospital-FT BELKNAP	2004			99,539
ВІ	МТ	Govt	HAYS	12665	PHS Indian Health Center	2004			30,979
ВІ	МТ	Govt	HEART BUTTE	16175	PHS Indian Health Center	2005	1982	ROFEC	9,002
ВІ	MT	Govt	LAME DEER	11504	PHS Institutional Support Fac	2005	1982	ROFEC VIII	115,308
ВІ	MT	Govt	LODGE GRASS	37556	Quarters Compound	2003	1994	Eng Services	13,616
BI	MT	Govt	POPLAR	11505	PHS Institutional Support Fac	2004			23,472
BI	MT	Govt	PRYOR	14673	PHS Indian Health Center	2003	1092	ROFEC	19,597
וט	IVII	COVI		17013	PHS Institutional	2003	1302	IVOI LO	13,337
BI	MT	Govt	ROCKY BOYS	12679	Support Fac	2005			13,441
ВІ	MT	Govt	WOLF POINT	20146	PHS Indian Health Center	2004			20,610
ВІ	MT	Govt	LODGE GRASS	03215	IHS HEALTH CLINIC & LAND	2000	1994	Eng Services	
ВІ	MT	Tribe	POPLAR	BIFP1	TRIBAL HEALTH CENTER		1983	ROFEC VIII	28,643
NS	MS	Govt	CARTHAGE	32061	PHS Indian Health Station	2002			2,440
NS	NC	Govt	CHEROKEE	11521	PHS Indian Hospital	2002	1986	Garratech	93,116

OK	KS	Govt	LAWRENCE	11493	PHS Indian School Health Ctr	2004			16,992
ОК	OK	Govt	CLINTON	11529	PHS Indian Hospital	2004	1985	FKW, Inc A&E	41,077
ОК	ОК	Govt	CLAREMORE	11528	PHS Indian Hospital	2003	1980	ROFEC IV	109,727
OK	ОК	Govt	ANADARKO	37552	PHS Indian Health Center	2003		2003 Audit from a DOE SAVEnergy vendor	20,000
NV	ΑZ	Govt	WINSLOW	11486	PHS Indian Health Center	2000			48,982
NV	AZ	Govt	WINDOW ROCK	11485	PHS Institutional Support Fac		1983	ROFEC IX	50,321
NV	AZ	Govt	TUBA CITY	11483	PHS Indian Hospital	1998			532,377
NV	AZ	Govt	TSAILE	37554	PHS Indian Health Center	1999			57,543
NV	NM	Govt	SHIPROCK	11517	PHS Institutional Support Fac	1999			142,389
NV	AZ	Govt	PINON	11976	PHS Indian Health Station	1999		HEMSLEY LEE	6,737
NV	AZ	Govt	MANY FARMS ROUGH ROCK	16171	PHS Indian Health Center	1999		HEMSLEY LEE	29,436
NV	AZ	Govt	KAYENTA	11974	PHS Indian Health Center	1999	1970	HEMSLEY LEE	84,819
NV	AZ	Govt	INSCRIPTION HOUSE	35774	PHS Indian Health Center	1999			53,005
NV	NM	Govt	HUERFANO (NAGEEZI)	35775	PHS Indian Health Center	1999	1313	I ILIVIOLE I LEE	37,306
NV	AZ	Govt	HOTEVILLA DINNEBITO	19718	PHS Indian Health Station			HEMSLEY LEE	1,262
NV	AZ	Govt	GREASEWOOD		PHS Indian Health Station	1990	1070	ROFEC IX	2,526
NV	NM	Govt	GALLUP	11969	PHS Indian Medical Center	1999			264,743
NV	NM	Govt	FORT WINGATE		PHS Indian Health Center	1999	1903	NOFEC IX	7,656
NV	AZ		DENNEHOTSO	15381	PHS Indian Health Station	1997	1092	ROFEC IX	1,262
NV	NM	Govt	CROWNPOINT PUEB PINT	11980	PHS Indian Health Station	1997			5,205
NV	NM	Govt	CROWNPOINT PUEB PINT	11511	PHS Indian Hospital	1997	1919	TILIVIOLE I LEL	210,919
NV	AZ	Govt	CHINLE	11468	PHS Indian Hospital	1999		HEMSLEY LEE	381,590
NS	MS	Govt		32070	PHS Indian Hospital	2002		Energy Services	58,048
NS	MS	Govt	PHILADELPHIA	11500	PHS Institutional Support Fac	2002			6,572
NS	NC	Govt	CHEROKEE	41223	NASHVILLE AREA ADMINISTRATION	2002			2,400
NS	NC	Govt	CHEROKEE	41222	NASHVILLE AREA YRTC	2002			13,331

ОК	ОК	Govt	LAWTON	11533	PHS Indian Hospital	2003		2003 Audit from a DOE SAVEnergy vendor	90,313
ОК	ОК	Govt	PAWNEE	11534	PHS Indian Health Center	2003		OK Energy An	28,137
OK	OK	Govt	TAHLEQUAH	11537	PHS Institutional Support Fac	2003		J,	9,410
OK	OK	Govt	TAHLEQUAH	37553	W W HASTING HOSPITAL	2003	1005	OK Energy An	147,831
OK	OK	Govi	TATILEQUALI	3/333	PHS Institutional	2003	1995	OR Ellergy All	147,031
OK	OK	Govt	TALIHINA	11536	Support Fac CARL ALBERT	1997	1985	CONSULTANT	157,730
					INDIAN				
OK	OK	Govt	ADA	03352	HOSPITAL		1985	FKW, Inc A&E	2,690
OK	OK	Govt	PAWHUSKA	03054	IHS INDIAN HEALTH CENTER		1985	FKW, Inc A&E	
PH	AZ	Govt	CIBECUE	33113	PHS Indian Health Center		1983	ROFEC IX	13,100
PH	UT	Govt	FORT DUCHESNE	11550	PHS Indian Health Center	2001	2001	EME GROUP	28,616
PH	ΑZ	Govt	LAVEEN	12676	PHS Indian Health Center	2006			2,900
PH	NV	Govt	MCDERMITT	33114	PHS Indian Health	2000	1983	ROFEC IX	2,590
PH	NV	Govt	OWYHEE	11507	PHS Indian Hospital	2001	2001	EME GROUP	87,674
PH	AZ	Govt	PARKER	11472	PHS Indian Hospital	2007	1982	ROFEC IX	130,029
PH	AZ	Govt	PEACH SPRINGS	11975	PHS Indian Health Center	2007			23,346
PH	ΑZ	Govt	PHOENIX	11473	PHS Indian Medical Center	2001	2001	EME GROUP	271,641
PH	ΑZ	Govt	SACATON	11475	PHS Indian Hospital	2006			145,020
PH	ΑZ	Govt	SACATON	41216	GILA RIVER YRTC	2006			39,561
PH	AZ	Govt	SAN CARLOS	11477	PHS Indian Hospital	2001	2001	EME GROUP	92,963
PH	AZ	Govt	SUPAI CANYON		PHS Indian Health Station	2007			5,744
PH	ΑZ	Govt	WHITERIVER	11484	PHS Indian Hospital	2001	2001	EME GROUP	247,830
PH	CA	Govt	WINTERHAVEN	11488	PHS Indian Hospital	2005	1982	ROFEC IX	21,766
РО	WA	Govt	BELLINGHAM	37567	PHS Indian Health Center	2000		Contractor	792
РО	OR	Govt	CHEMAWA (Salem)	11540	PHS Indian Health Center	2003		ES-S	23,124
РО	ID	Govt	FORT HALL	11491	PHS Indian Health Center	2003	1994	ES-S	31,076
РО	ID	Govt	LAPWAI	20944	PHS Indian Health Center		1997	ES-S	10,168
РО	WA	Govt	NEAH BAY	30067	PHS Indian Health Center	2003	1996	ES-S	22,809

РО	ID	Tribe	LAPWAI	PO320	NEZ PERCE A/SA CENTER	2007	1997		25,382
РО	WA	Tribe	LA CONNER	PO370	SWINOMISH INDIAN SENATE	2050			10,899
РО	OR	Tribe	KLAMATH FALLS	PO160	KLAMATH FALLS HEALTH ADMIN	2050			12,794
PO	WA	Tribe	KINGSTON	PO050	PORT GAMBLE HEALTH CENTER	2050			15,039
PO	WA	Tribe	INCHELIUM	PO18A	COLVILLE TRIBAL HCTR- INCHELIUM	2050			26,534
PO	OR	Tribe	GRANDE RONDE	PO120	GRAND RONDE HEALTH CENTER	2050			30,552
PO	ID	Tribe	FORT HALL	PO460	SHOSHONE- BANNOCK A/SA CENTER	2050			22,006
PO	WA	Tribe	EVERSON	PO140	NOOKSACK TRIBAL HEALTH CENTER	2050			10,813
PO	WA	Tribe	ELMA	PO08A	SQUAXIN ISLAND - ELMA GRP HOME	2050			13,441
PO	OR	Tribe	COOS BAY	PO230	COQUILLE TRIBAL HEALTH CENTER	2050			15,079
PO	OR	Tribe	CHILOQUIN	PO16A	CHILOQUIN TRIBAL HEALTH CENTER	2050			19,760
PO	OR	Tribe	CHILOQUIN	41124	CHILOQUIN IHS DENTAL CLINIC			Bldg Manufacturer	1,800
РО	WA	Tribe	BELLINGHAM	PO300	LUMMI BUSINESS COUNCIL	2004	1994		17,431
PO	WA	Tribe	AUBURN	PO030	MUCKLESHOOT TRIBAL HEALTH CTR	2050			45,332
PO	WA	Tribe	AUBURN	37566	MUCKLESHOOT IHS DENTAL CLINIC	2003	1993	Bldg Manufacturer	480
PO	OR	Govt	WARM SPRINGS	03306	IHS IND HEALTH CENTER	2007	1997		
РО	WA	Govt	WELLPINIT	11553	PHS Indian Health Center	2010	2000	ES-S, New Const in 2000	26,024
PO	OR	Govt	WARM SPRINGS	11542	PHS Indian Health Center	2007		ES-S	12,058
PO	WA	Govt	TULALIP	37569	TULALIP DENTAL CLINIC	2003		Bldg Manufacturer	1,960
PO PO	WA	Govt	TAHOLAH TOPPENISH	19712	Center PHS Indian Health Center	2004		ES-S ES-S	10,883 53,452
PO	WA	Govt	TACOMA	35776	Center PHS Indian Health	2002	1992	ES-S	91,676
PO	WA	Govt	SPOKANE	41217	OF THE SEVEN NAT PHS Indian Health	2005	1995	ES	31,000
PO	WA	Govt	NESPELEM	11551	PHS Indian Health Center HEALING LODGE	2006	1997	ES-S	24,410

PO	WA	Tribe	MARYSVILLE	PO470	TULALIP TRIBAL HEALTH CENTER	2050			44,269
РО	OR	Tribe	PENDLETON	PO380	UMATILLA TRIBAL HEALTH CENTER	2050			26,948
РО	ID	Tribe	PLUMMER	PO190	BENEWAH TRIBAL HEALTH CENTER	2050			64,333
РО	WA	Tribe	QUEETS	20610	PHS Indian Health Station	0	0	Bldg TX to Tribe 2000	2,204
РО	OR	Tribe	SALEM	PO430	NANITCH SAHALLIE	2050			18,723
РО	OR	Tribe	SILETZ	PO130	SILETZ TRIBAL HEALTH CLINIC	2050			21,498
РО	WA	Tribe	ТАСОМА	PO450	PUYALLUP TRIBAL HEALTH CENTER	2012	2002	Tacoma Light and Power	39,093
PO	WA	Tribe	TAHOLAH	PO330	QUINAULT MENTAL HEALTH CENTER	2050			28,869
РО	OR	Tribe	WARM SPRINGS	PO220	WARM SPRINGS TRIBAL A/SA CTR	2050			11,314
TU	ΑZ	Govt	SAN XAVIER	11479	PHS Tucson Area Office	2004	1982	ROFEC IX	54,764
TU	ΑZ	Govt	SELLS SANTA ROSA	11478	PHS Indian Health Center	2004	1982	ROFEC IX	3,733
TU	AZ	Govt	SELLS SANTA ROSA	11482	PHS Indian Hospital	2004	1991	Harrington	150,761

# C. Financing Mechanisms. Provide narrative information related to the use of Energy-Savings Performance Contracts (ESPCs) and Utility Energy Services Contracts (UESCs).

Aberdeen -- The Aberdeen Area and Engineering Services-Seattle negotiated an ESPC with Johnson Controls Inc. in July 2001. The started in October 2001 with a 15 year contract period.

Albuquerque -- The Area reviewed the possibility of implementing an ESPC project for several service units. The outcome was unsuccessful. Reports from the ESPC Contractor determined that an undertaking would not be beneficial to the company and the government due to remoteness, size of facilities, utilities, etc.

Bemidji -- ESPCs were considered, but viewed as too costly. The investment to savings ratio was not adequate. It was doubtful if some projects would result in sufficient savings to pay the contractors demanded payments.

Billings -- ESPCs and UESCs are not available or are not feasible at our isolated locations.

Oklahoma City -- Use of the DOE Super ESPC contract by the OKC Area I.H.S. and the Cherokee Nation of Oklahoma gained renewed interest in FY02.

Tucson -- Funding for all energy conservation work is currently from M&I or M&M funds.

- D. Energy Star® and Other Energy-Efficient Products. Describe steps taken to promote the purchase of Energy Star® products and/or products that are in the upper 25 percent of energy efficiency as designated by FEMP. Note whether energy efficient criteria have been incorporated into all guide specifications and product specifications developed for new construction and renovation. Also note whether such criteria have been incorporated into product specification language.
- Alaska -- Information is disseminated to AHFAC and service unit staff relative to energy efficient products.
- Albuquerque -- Energy efficiency and cost savings are considered by personnel recommending and specifying products for procurement. Information on products is continuously forwarded to the project engineers and a record of these products is kept updated and available in the area HF library.
- Bemidji -- Energy efficiency is a routine determinant of product choices.
- Billings -- All designs provided by the Billings Area Facilities Management staff use MASTERSPEC for specification writing. MASTERSPEC is updated quarterly with the latest energy efficient products.
- Phoenix -- With all new projects, procurement of Energy Star and other energy efficient products are incorporated into specifications.
- Portland -- The Portland Area Indian Health Service Guidelines establishes model operations and maintenance purchasing procedures for increased energy efficiency with the service units.
- Tucson -- The use of Energy Star products are considered if feasible under project or renovation funding limitations.
- E. Energy Star® Buildings. Report the number and percentage of buildings that have met the Energy Star® Building criteria and have officially been designated Energy Star® Buildings. (Buildings must rank in the top 25 percent in energy efficiency relative to comparable commercial and Federal buildings to be eligible for the Energy Star® Buildings designation. See <a href="https://www.epa.gov/buildings/label">www.epa.gov/buildings/label</a>.)
- Albuquerque -- A recent benchmarking of the area hospitals utilizing the designated EPA performance rating tool shows that the Albuquerque Indian Hospital is eligible to apply for an Energy Star Building Label. Utility data was entered for five area hospitals and one health center. Further data will be input onto the website for the Albuquerque Indian Hospital and an application will be submitted for consideration. The facility had an initial score of 85. This same facility was recognized as a showcase facility for the new geothermal system that was installed several years ago.
- Billings -- The Billings Area currently has three hospitals within EPA's Energy Star Label Database. The Blackfeet Hospital is the only facility ranked high enough at a 76 to obtain the Energy Star Label. That is 33 percent of the Billings Area applicable buildings currently meeting the Energy Star Building criteria.
- Portland -- Energy Star has not yet defined criteria for health care facilities. Therefore, there is no information to report at this time.
- F. Sustainable Building Design. Report whether sustainable building design principles have been incorporated into the siting, design, and construction of new facilities. (See <a href="www.wbdg.org">www.wbdg.org</a> for a description of sustainable building design principles.)

- Albuquerque -- All new construction incorporates energy efficient materials, equipment, and construction.
- Bemidji -- Building design contracts are required to follow sustainable building design principles.
- Nashville -- The Nashville Area does not plan to construct any new government owned facilities. Any new facility construction in the Nashville Area is limited to construction by Title I and III Tribes. Assistance is offered for design through the Engineering Services office in Dallas. The design is review by both the Area staff and the ES Dallas staff. Design review services have been used by Tribes in the past but design services have not.
- Navajo -- The Health Facilities Planning Manual is used for all renovation and new facilities construction. Energy efficiency is incorporated into the design as is the use of energy efficient products.
- Portland -- New facility construction and remodeling will use new practices and products for energy efficiency and water conservation.
- Tucson -- Currently only replacement facilities being investigated. The replacement buildings will have more efficient lighting and environmental systems.
- G. Energy Efficiency in Lease Provisions. Describe how energy and water efficiency are considered when OPDIVs enter into new leases or renegotiate/extend existing leases (e.g., preference for buildings with sustainable design and development, preference for certified Energy Star® Buildings, etc.).
- Albuquerque -- The Albuquerque Area has nearly 540,000 sq. ft. of space, 3% of which is leased space. Leased facilities are typically small Health Clinics or Health Stations at the various pueblos. These are typically inclusive of existing buildings which are used for a variety of functions besides health care. When any of these facilities are replaced or new leases are requested, more energy efficient designs are incorporated into the new facilities.
- Nashville -- Local GSA office incorporates these requirements if a relocation occurres.
- H. Energy-Intensive Facility Efficiency Improvements. Highlight activities undertaken to explore efficiency opportunities in energy-intensive facilities. This may include activity in the following areas: steam systems, boiler operation, air compressor systems, industrial processes, fuel switching, cogeneration, and other efficiency and renewable energy technologies.
- Aberdeen -- New DDC control systems were installed at six locations to allow computer controlled heating and cooling systems.
- Alaska -- The Alaska Area has conducting Energy Audits at six of the Area Hospitals. The results will precipitate in energy projects to be accomplished through our normal project cycle; the funding committee AHFAC meets twice yearly to consider projects. Projects for BBAHCs Kanakanak Hospital have already been approved and are awaiting funding with FY 2002 dollars. The energy consumption for the Alaska Area has increased slightly in 2002 by approximately 15,000 MMBTUs and due to the increased cost for electric, fuel oil, natural gas and waste heat the overall energy cost went up by approximately \$260,000 this year; reflecting a 6% increase in the cost of energy.
- Bemidji -- Boilers were converted from fuel oil to natural gas. Cast iron boilers were replaced with energy efficient staged boiler systems. Lamps and ballasts were replaced with lower energy use models. DDCs

- were installed and air treatment was regulated. Variable speed HVAC units were installation that used digital controls.
- Billings -- Automated control valves are being installed for each of the four boilers and both chillers at the Lame Deer Health Center to reduce gas and electrical consumption. The Ft. Belknap Hospital and the Hays Health Center are currently having their automated building control systems reprogrammed to optimize the use of outside air.
- Navajo -- In current renovation projects boilers have been replaced with energy efficient boilers, cooling towers have been replaced with energy efficient cooling towers that require less energy at start up. Flat plate heat exchanges have been installed.
- Oklahoma City -- A study was performed in FY02 at the W.W. Hastings Indian Hospital in Tahlequah to determine the adequacy of both the mechanical and electrical systems. Based on the report, decisions will be made, and priorities set, to upgrade/replace the equipment as required.
- Tucson -- A new EMCS system was installed at Sells Hospital. It replaced an outdated and nonfunctioning system.
- I. Highly Efficient Systems. Describe new construction and/or retrofit projects for which combined cooling, heating, and power systems were installed. Report whether local natural resources were surveyed to optimize use of available biomass, geothermal, or other naturally occurring energy sources.
- Alaska -- A ground water cooling project is currently in construction at the Alaska Native Medical Center in Anchorage (ANMC) and is anticipated to complete in FY03. The energy savings is anticipated to reflect in an approximate \$50,000 annual savings to the ANMC.
- Albuquerque -- Renovation continues at the Albuquerque Hospital to replace the old boiler/chiller system with a geothermal ground source heat pump loop system. The new system is presently utilized in the areas where renovation has been completed. A new scheduling system is under implementation. The chiller has also been connected to a cooling coil to pre-cool the area which has already reduced the heat pump cycling time. The Mescalero Hospital targeted energy efficiency by replacing 100% of the existing lighting system with more efficient T-8 lamps and electronic ballasts. The Zuni hospital replaced the boiler burners with an appropriate propane gas burner. The boilers had been using butane burners. The mismatch was discovered after the burners could not be adjusted to the proper efficiency. Gas usage has since been monitored to determine savings and improved efficiency. A new roof project is under design for the Zuni hospital that will replace the existing R7 roofing with an R30 system.
- Billings -- Quarters at Lame Deer are being converted from electrical heat to propane gas. Phase I & II are complete and Phase III is scheduled for 2003.
- Phoenix -- Install VFDs on chiller water pumps. Install chiller optimization software and control at Phoenix Indian Medical Center.
- J. Off-Grid Generation. Describe the installation of new solar hot water, solar electric, solar outdoor lighting, small wind turbines, fuel cells, and other off-grid alternatives.
- Bemidji -- Installation of off-grid power generation at White Earth Health Center was proposed for 2003.
- Oklahoma City -- Info on off-grid solar outdoor lighting that is available from GSA was e-mailed to facility managers for their consideration.

- K. Electrical Load Reduction Measures. Describe your plans for electrical load reduction that will be taken during power emergencies to cut electricity consumption its buildings and facilities.
- Albuquerque -- Each service unit has emergency load reduction plans for their facilities. All facilities have emergency generators. The facility managers have designated equipment and areas that maintain power during emergency situations.
- Phoenix -- The area office will alert all service units within the area when energy reduction is needed. The service units will load the emergency generators, adjust thermostats, shut down all unnecessary and nonessential equipments, turn off lights, etc.
- Portland -- Upon notification of a power emergency. The Portland Area Office will alert all Federal IHS Facilities within the Portland Area. The facilities will adjust building temperatures, turn off lights, and shutting down other nonessential equipment.
- Tucson -- During power emergencies, all non-essential personnel will be dismissed and power consumption in affected buildings greatly reduced. The critical facilities will remain operational but with temperature thermostats adjusted to reduce energy.

## Attachment A

FY-2002 OPDIV Energy Management Data Report

## **FY 2002 ENERGY MANAGEMENT DATA REPORT**

OPDIV:	Indian Health Service	Prepared by:	Adam T. Scully, P.E.
Date:	14-Nov-02	Phone:	301.443.4572

#### PART 1: ENERGY CONSUMPTION AND COST DATA

#### 1-1. Standard Buildings/Facilities

F	0	A	A 1 O 1			O'ta Dalbaarad	Fat Carrier Dire
Energy	Consumption	Annual	Annual Cost			Site-Delivered	Est. Source Btu
Type	Units	Consumption	(Thou. \$)	Unit C	ost (\$)	Btu (Million)	(Million)
Electricity	kWH	0.0	\$0.0	#DIV/0!	/kWh	0.0	0.0
Fuel Oil	Thou. Gal.	0.0	\$0.0	#DIV/0!	/gallon	0.0	0.0
Natural Gas	Thou. Cubic Ft.	0.0	\$0.0	#DIV/0!	/Thou Cu Ft	0.0	0.0
LPG/Propane	Thou. Gal.	0.0	\$0.0	#DIV/0!	/gallon	0.0	0.0
Coal	S. Ton	0.0	\$0.0	#DIV/0!	/S. Ton	0.0	0.0
Purch. Steam	BBtu	0.0	\$0.0	#DIV/0!	/MMBtu	0.0	0.0
Other	BBtu	0.0	\$0.0	#DIV/0!	/MMBtu	0.0	0.0
		Total Costs:	\$0.0		Total:	0.0	0.0
Standard Building	gs/Facilities (Thou.						
Gross Sq	uare Feet)	0.0			Btu/GSF:	#DIV/0!	#DIV/0!

## 1-2. Industrial, Laboratory, Research, and Other Energy-Intensive Facilities

Energy	Consumption	Annual	Annual Cost			Site-Delivered	Est. Source Btu
Type	Units	Consumption	(Thou. \$)	Unit C	ost (\$)	Btu (Million)	(Million)
Electricity	kWH	134,741,039.0	\$9,631.0	0.071477852	/kWh	459,736.4	1,394,030.8
Fuel Oil	Thou. Gal.	1,290.0	\$1,652.0	\$1.28	/gallon	178,923.0	178,923.0
Natural Gas	Thou. Cubic Ft.	578,544.0	\$2,078.0	\$3.59	/Thou Cu Ft	596,479.0	596,479.0
LPG/Propane	Thou. Gal.	1,155.0	\$820.0	\$0.71	/gallon	110,303.0	110,303.0
Coal	S. Ton	0.0	\$0.0	\$0.00	/S. Ton	0.0	0.0
Purch. Steam	BBtu	0.0	\$0.0	\$0.00	/MMBtu	0.0	0.0
Other	BBtu	0.0	\$0.0	\$0.00	/MMBtu	0.0	0.0
		Total Costs:	\$14,181.0		Total:	1,345,441.4	2,279,735.8
Energy-Intensiv	e Facilities (Thou.						
Gross S	quare Feet)	6,477.8			Btu/GSF:	207,700	351,930

#### 1-3. Exempt Facilities

Energy	Consumption	Annual	Annual Cost			Site-Delivered	Est. Source Btu
Туре	Units	Consumption	(Thou. \$)	Unit C	ost (\$)	Btu (Million)	(Million)
Electricity	kWH	0.0	\$0.0	#DIV/0!	/kWh	0.0	0.0
Fuel Oil	Thou. Gal.	0.0	\$0.0	#DIV/0!	/gallon	0.0	0.0
Natural Gas	Thou. Cubic Ft.	0.0	\$0.0	#DIV/0!	/Thou Cu Ft	0.0	0.0
LPG/Propane	Thou. Gal.	0.0	\$0.0	#DIV/0!	/gallon	0.0	0.0
Coal	S. Ton	0.0	\$0.0	#DIV/0!	/S. Ton	0.0	0.0
Purch. Steam	BBtu	0.0	\$0.0	#DIV/0!	/MMBtu	0.0	0.0
Other	BBtu	0.0	\$0.0	#DIV/0!	/MMBtu	0.0	0.0
		Total Costs:	\$0.0		Total:	0.0	0.0
Exempt Faciliti	es (Thou. Gross			•			
Squai	re Feet)	0.0			Btu/GSF:	#DIV/0!	#DIV/0!

#### 1-4. Tactical Vehicles and Other Equipment

						Est. Carbon
	Consumption	Annual	Annual Cost			Emissions
	Units	Consumption	(Thou. \$)	Unit Cost (\$)	Btu (Million)	(Metric Tons)
Auto Gasoline	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0
Diesel-Distillate	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0
LPG/Propane	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0
Aviation Gasoline	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0
Jet Fuel	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0
Navy Special	Thou. Gal.	0.0	\$0.0	#DIV/0! /gallon	0.0	0
Other	Thou. Gal.	0.0	\$0.0	#DIV/0! /MMBtu	0.0	
	_	Total Costs	\$0.0		0.0	0

#### 1-5. WATER CONSUMPTION, COST AND EFFICIENCY MEASURES

	Consumption	Annual	Annual Cost
	Units	Consumption	(Thou. \$)
Water	Million Gal.	138.0	\$361.0
Best Mana	gement Practice Ir	mplementation Trad	cking Data
Number of facilities	174		
Number of facilities	with completed w	ater management	
plans	0		
Number of facilities			
implemented	0		
*number in the OPI	OIV inventory, can	be buildings, base	s, or campuses

#### 1-6. RENEWABLE GREEN ENERGY PURCHASES

(Only include renewable energy purchases developed or contracted after 1990)

	Consumption	Annual	Annual Cost
	Units	Consumption	(Thou. \$)
Electricity from			
Renewables	kWH	0.0	0.0
Natural Gas from			
Landfill/Biomass	MMBtu	0.0	\$0.0
Renewable			
Thermal Energy	MMBtu	0.0	\$0.0
Other Renewable			
Energy*			

\*For other renewable energy that does not fit any category, please fill in the type, units used, annual consumption and cost, and include any additional information in your narrative submission. For example, biodiesel used in non-transportation applications. (Renewable fuels used for transportation will be collected through GSA's Fleet Managment reporting process.)

#### 1-7. SELF-GENERATED RENEWABLE ENERGY INSTALLED AFTER 1990

	Consumption Units	Total Annual Energy	Energy Used by Agency*
Electricity from			-
Renewables	kWH	134,741.0	9.6
Natural Gas from			
Landfill/Biomass	MMBtu	0.0	0.0
Renewable			
Thermal Energy**	MMBtu	0.0	0.0
Other Renewable			
Energy***		0.0	0.0

\*Energy used by OPDIV equals total annual generation unless a project sells a portion of the energy it produces to another agency or the private sector. It can equal zero in the case of non-Federal energy projects developed on Federal land.

<sup>\*\*</sup>Examples are geothermal, solar thermal, and geothermal heat pumps, and the thermal portion of combined heat and power projects. Thermal energy from geothermal heat pumps should be based on energy savings compared to conventional alternatives.

<sup>\*\*\*</sup>For other renewable energy that does not fit any category, fill in the type, units used, annual consumption and cost, and include any additional information in your narrative submission. For example energy displaced by daylighting technology or passive solar design.

#### PART 2: ENERGY EFFICIENCY IMPROVEMENTS

#### 2-1. DIRECT AGENCY OBLIGATIONS

	FY 2002		Projected FY 2003	
	(MMBTU)	(Thou. \$)	(MMBTU)	(Thou. \$)
Direct obligations for facility energy				
efficiency improvements, including				
facility surveys/audits		\$1,017.0		\$1,000.0
Estimated annual savings				
anticipated from obligations	15,524.0	\$260.0	15,000.0	\$200.0

#### 2-2. ENERGY SAVINGS PERFORMANCE CONTRACTS (ESPC)

	Annual savings	
	(MMBTU)	(number/Thou. \$)
Number of ESPC Task/Delivery		
Orders awarded in fiscal year &		
annual energy (MMBTU) savings.	23,374.0	1/1900
Investment value of ESPC Task/Deliv	ery Orders	
awarded in fiscal year.		\$1,900.0
Amount privately financed under ESF	PC Task/Delivery	
Orders awarded in fiscal year.	\$0.0	
Cumulative guaranteed cost savings	of ESPCs	
awarded in fiscal year relative to the	baseline spending.	\$0.0
Total contract award value of ESPCs	awarded in fiscal	
year (sum of contractor payments for		
M&V, and other negotiated performal		
services).	\$381.0	
Total payments made to all ESP cont	ractors in fiscal	
year.		\$381.0

#### 2-3. UTILITY ENERGY SERVICES CONTRACTS (UESC)

	Annual savings	
	(MMBTU)	(number/Thou. \$)
Number of UESC Task/Delivery		
Orders awarded in fiscal year &		
annual energy (MMBTU) savings.	0.0	0
Investment value of UESC Task/Deliv	ery Orders	
awarded in fiscal year.		\$0.0
Amount privately financed under UES		
Orders awarded in fiscal year.	\$0.0	
Cumulative cost savings of UESCs av	warded in fiscal	
year relative to the baseline spending	<b>J.</b>	\$0.0
Total contract award value of UESCs	awarded in fiscal	
year (sum of payments for debt repay		
negotiated performance period service	\$0.0	
Total payments made to all UESC co	ntractors in fiscal	
year.		\$0.0

### 2-4. UTILITY INCENTIVES (REBATES)

	Annual savings	
	(MMBTU)	(Thou. \$)
Incentives received and estimated		
energy savings	0.0	\$0.0
Funds spent in order to receive		
incentives		\$0.0

#### 2-5. TRAINING

	(number)	(Thou. \$)
Number of personnel		
trained/Expenditure	31.0	\$25.7

I	Est. Carbon
l	Emissions
l	(Metric Tons)
Ī	21,212,239
Ī	3,570
ľ	8,631
Ī	1,874
Ī	0
ľ	0
ľ	
[	21,226,313

	st. Carbon	
E	missions	
(M	letric Tons)	
	0	
	0	
	0	
	0	
	0	
	0	
	0	

## Attachment B

FY-2002 OPDIV Energy Scorecard

## FY 2002 Federal Agency Energy Scorecard

Department/Agency Name	Contact Name and Phone
Indian Health Service	Adam T. Scully, P.E.
Name of Senior Energy Official	Signature of Senior Energy Official
Paul S. Fardig, P.E.	

Did your agency	Yes	No	Anticipated Submittal Date
Submit its FY 2002 energy report to OMB and DOE by January 1, 2003 (Sec. 303)?	Y		Nov 18, 2002
Submit a FY 2003 Implementation Plan by January 1, 2003 (Sec. 302)?	Y		Nov 18, 2002
Did your agency	Yes	No	Comments
Implement or continue to use new renewable energy projects at Federal installations or facilitate the siting of renewable generation on Federal land in FY 2002 (Sec. 204)? <sup>1</sup> (Refer to Table 1-6 on the Energy Management Data Report)		N	If yes, how many projects and how much energy generated? (Specify unit: MWH or MMBtu)  Solar  Wind  Thermal <sup>2</sup> Biomass  Other RE
Purchase energy generated from new renewable energy sources in FY 2002 (Sec. 204)? <sup>1</sup>		N	If yes, how much: MWH or MMBtu
Invest direct FY 2002 appropriations in projects contributing to the goals of the Order (Sec. 301)?	Y		If yes, how much: \$1,017,000
Specifically request funding necessary to achieve the goals of the Order in its FY 2004 budget request to OMB (Sec. 301)?		Ν	If yes, how much: \$
Perform energy audits of 10% of its facility space during the fiscal year (Sec. 402)?	Y		What percentage of facility space was audited during the FY? <b>15%</b> How much facility space has been audited since 1992? <b>68%</b>
Issue to private-sector energy service companies (ESCOs) any energy savings performance contract (ESPC) task orders (Sec. 403(a))? (Refer to Table 2-2 on the Energy Management Data Report)	Y		How many?1 Annual savings (MMBtu): 23,374 Total investment value³: \$1,900,000 Cumulative guaranteed cost savings: \$381,000 Contracts award value: \$381,000
Issue any utility energy services contract (UESC) task orders (Sec. 403(a))? (Refer to Table 2-3 on the Energy Management Data Report)		N	How many?

<sup>1 &</sup>quot;New" renewable energy means sources developed after 1990.

<sup>2</sup> Examples are geothermal, solar thermal, and geothermal heat pumps. Thermal energy from geothermal heat pumps should be determined as follows: Thermal energy = Total geothermal heat transferred – electrical energy used.

<sup>3</sup> Investment value includes design, materials, labor, overhead, and profit but excludes contractor's financing costs and government's administration costs. Using investment value allows comparison with other traditional execution methods such as appropriated and working capital funded projects.

			Contracts award value: \$
Did your agency	Yes	No	Comments
Incorporate energy efficiency requirements into relevant acquisitions (Sec. 403(b)(3))?	Y		
Adopt and apply the sustainable design principles (e.g., Whole Building Design Guide, Leadership in Energy and Environmental Design) to the siting, design, and construction of new facilities or major (budget line item) renovations begun in FY 2002(Sec. 403(d))?	Y		Number of new building design/construction projects in FY 2002: 1 Number of these projects that incorporated sustainable design principles: 5
Provide training to appropriate personnel <sup>4</sup> on energy management (Sec. 406(d))?	Y		Number of appropriate personnel trained: 31  Total number of appropriate personnel: 250
Implement any additional management tools (Sec. 406)?	Y		Check all that apply:  Awards: 3  Performance Evaluations:  Showcase Facilities:  Number of Showcase:  Facilities designated in fiscal year:
Establish Water Management Plans and implement at least 4 Best Management Practices in at least 5% of agency facilities?		Ν	Number of facilities with Water Management Plans:

NOTE: Provide additional information if a "no" reply is used for any of the questions above.

Please enter data from annual energy report pertinent to performance toward the goals of Executive Order 13123	Base Year	Previous Year (2001)	Current Year (2002)	% Change (Current vs. Base)
Site Energy Efficiency Improvement Goals (Sec. 202). 1985 Base Year	Btu/Ft <sup>2</sup>	Btu/Ft <sup>2</sup>	Btu/Ft <sup>2</sup>	%
Source Energy Use (Sec. 206). 1985 Base Year	BBtu	BBtu	BBtu	%
Industrial/Energy Intensive Facilities Goals (Sec. 203). 1990 Base Year	148,416 Btu/unit	207,333 Btu/unit	207,700 Btu/unit	-15 %
Water Conservation Goal (Sec. 207). 2000 Base Year	MGal	N/A	138 MGal	
Renewable Energy (Sec. 204). Energy used from self-generation and RE power purchases	N/A	BBtu	BBtu	N/A

Abbreviation Key: Btu/Ft<sup>2</sup> = British thermal units per gross square foot

Btu/unit = British thermal units per unit of productivity (or gross square foot when such

a unit is inappropriate or unavailable)

MGal = Million gallons

MMBtu = Million British Thermal Units BBtu = Billion British Thermal Units

RE = Renewable energy N/A = Not applicable

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<sup>4</sup> Appropriate personnel include the agency energy management team as well as Federal employees and on-site contractors who are energy or facility managers, operations and maintenance workers, design personnel, procurement and budget staff, and legal counsel.

## Attachment C

Industrial and Laboratory Facilities Inventory

						Next Energy Audit	Last Energy Audit	Energy Audit	
area	state	х	city_town	inst_no	inst_name	Year	Year	Team	GSF
					QUENTIN N				
AB	ND	Govt	BELCOURT	11522	BURDICK	2013	1995	SDStateUniv	199,865
, ,	00	<b>.</b>	EAOLE BLITTE	40470	PHS Indian	0000	4000	DOEEO \ ////	70.005
AB	SD	Govt	FORT	13170	Hospital PHS Indian Health	2002	1982	ROFEC VIII	79,635
AB	SD	Govt	THOMPSON	16180	Center	2006	1995	SDStateUniv	35,114
7.0	OD	COVI	THOWN CON	10100	PHS Indian Health	2000	1000	Obolateoniv	00,114
AB	ND	Govt	FORT TOTTEN	11523	Center	2010			22,712
					PHS Indian				
AB	ND	Govt	FORT YATES	11524	Hospital	2005	1995	SDStateUniv	93,332
					PHS Indian Health				
AB	SD	Govt	KYLE	12669	Center	2009	1995	SDStateUniv	47,202
AB	SD	Cove	LOWER BRULE	20608	PHS Indian Health Center	2006			19,030
AD	SD	Govi	LOWER BROLE	20000	PHS Indian Health	2000		ROFEC-	19,030
AB	SD	Govt	MCLAUGHLIN	15386	Center	2004	1983	DENVER	19,229
,	-	-			PHS Indian Health				,
AB	ND	Govt	NEW TOWN	11525	Center	2008	1995	SDStateUniv	35,861
					PHS Institutional				
AB	SD	Govt	PINE RIDGE	11545	Support Fac		1995	SDStateUniv	298,177
\ D	CD.	04	DINE DIDOE	44005	PHS Indian	0040			004 705
AB	SD	Govt	PINE RIDGE	41235	Hospital PHS Indian	2012			201,705
AB	SD	Govt	RAPID CITY	11546	Hospital	2015	1082	ROFEC VIII	192,935
7.0	OD	COVI	RED	11040	PHS Indian Health	2010	1302	ROI LO VIII	132,333
AB	SD	Govt	SCAFFOLD	13509	Station		1982	ROFEC VIII	960
					PHS Indian				
AB	SD	Govt	ROSEBUD	41237	Hospital	2014			197,584
			01005-011		PHS Indian	22.4	400=	000000	4= 000
AB	SD	Govt	SISSETON	11548	Hospital	2017	1995	SDStateUniv	47,626
AB	SD	Govt	WAGNER	11549	PHS Indian Health Center	2007	1005	SDStateUniv	45,110
70	30	COVI	VVAGINEIX	11043	ABERDEEN AREA	2007	1990	ODGIALECTIIV	43,110
AB	SD	Govt	WAKPALA	41236	YRTC	2011			25,749
					PHS Indian Health				,
AB	SD	Govt	WANBLEE	13508	Center	2003	1983	ROFEC VIII	23,839
					PHS Indian			ES-S contractor:	
AB	NE	Govt	WINNEBAGO	11506	Hospital	2016	1997	Sys-Tek, P.A.	52,896
AB	SD	Cove	MCLAUGHLIN	02202	DENTAL CLINIC		1005	SDStateUniv	
AD	טט	Govi	MICLAUGHLIN	03302	PHS Indian Medical		1990	NA EMCOR &	
AK	AK	Govt	ANCHORAGE	37561	Center	2007	2002	ANTHC	384,272
		2011		2.001	ANIAK HEALTH	2007	2002		551,272
AK	AK	Govt	ANIAK	30555	CTR	1999			1,288
					PHS Indian			NA EMCOR &	
AK	AK	Govt	BARROW	61087	Hospital	2007	2002	ANTHC	112,400

AK	AK	Govt	BETHEL	61088	PHS Indian Hospital	2007	2002		261,009
7	7 (1 (	Corr	DETTILL	01000	Kanakanak IHS	2007	2002	PDC Inc &	201,000
AK	AK	Govt	DILLINGHAM	61093	Hospital	2006	2001	ANTHC	135,204
, ·	7 (1 (		DILLINGI II (IVI	01000	PHS Indian Health	2000	2001	7441110	100,201
AK	AK	Govt	GAMBELL	61090	Station	1998			1,048
\(\rac{1}{2}\)	AIX	Govi	GAIVIDELE	01030	ALASKA NATIVE	1990		RSA Eng. &	1,040
AK	AK	Covt	KOTZEBUE	41231	HOSPITAL	2005	2000	ANTHC	82,411
AIX	AIX	Govi	KOTZEBUE	41231	Kotzebue Older	2003	2000	ANTIC	02,411
AK	AK	Covet	KOTZEBUE	61094	Qtrs		1000	BOEEC V CON	70 007
AN	AN	Govi	MT	01094	PHS Indian		1960	ROFEC-X, CON PDC,Inc. &	70,887
A 1/2	A 1/2	C = 1.4		04000		2007	2002	ANTHC	040.745
AK	AK	Govi	EDGECUMBE	61092	Hospital	2007	2002	ANTITO	212,715
A 1.2	0.16		NOODVIII	00554	PHS Indian Health	0005			00.4
AK	AK	Govt	NOORVIK	30554	Station	2005			884
			0.43/0.03/0.4	24222	PHS Indian Health	4000			20.4
AK	AK	Govt	SAVOONGA	61096	Station	1998			884
					PHS Indian Health				
AK	AK	Govt	SELAWIK	30064	Station	2005			884
					YUKON FLATS				
AK	AK	Tribe	FORT YUKON	AK007	HEALTH CTR	1998			5,920
					NORTON SOUND				
AK	AK	Tribe	NOME	AK017	REGIONAL	2007	2000		78,245
			ALBUQUERQU		PHS Indian				
AQ	NM	Govt	E	11508	Hospital	2004	1981	A/E Contractor	78,868
					PHS Indian Health				
AQ	NM	Govt	LAGUNA	11982	Station	2007	1997	A/E Contractor	6,628
					PHS Indian				
AQ	NM	Govt	MESCALERO	11514	Hospital	2007	1997	A/E Contractor	40,808
					PHS Indian				
AQ	NM	Govt	SAN FIDEL	33115	Hospital	2007	1997	A/E Contractor	111,615
					NEW SUNRISE				
AQ	NM	Govt	SAN FIDEL	37562	REG TREATMENT	2007	1997	A/E Contractor	15,224
					PHS Indian				
AQ	NM	Govt	SANTA FE	11516	Hospital	2007	1997	A/E Contractor	103,114
			G/		PHS Indian Health			7 4 2 001111 40101	,
AQ	NM	Govt	TAOS PUEBLO	41228	Center	2007	1997	A/E Contractor	19,981
			17.001.02220	11220	PHS Indian	2007		7 ( 2 001111 40101	10,001
AQ	NM	Govt	ZUNI	11520	Hospital	2007	1997	A/E Contractor	106,900
710	14101	Cove	COCHITI	11020	COCHITI HEALTH	2007	1007	7 V E CONTIGUIO	100,000
AQ	NM	Tribe	PUEBLO	AQ044	STATION		1997		638
70	INIVI	THE	SANTA CLARA	AQU44	SANTA CLARA		1331		030
AQ	NM	Tribo	PUEBLO	AQ036	CHR STATION		1997		586
AQ	INIVI	Tribe	PUEBLO	AQUSO	PHS Indian		1997		300
рг	NANI	Court	CASSIAKE	11101		1007	1004	Mortall® Assa	EZ 074
BE	MN	Govi	CASS LAKE	11494	Hospital	1997	1994	Martell&Asso	57,874
		01	NAYTAHWAUS	44400	PHS Indian Health	4000			0.445
BE	MN	Govt	П	11496	Center	1998			6,145
			DONIENA	10001	PHS Indian Health	4000	400:		0.40-
BE	MN	Govt	PONEMAH	12664	Center	1999	1994	Martell&Asso	6,492
			DOMOGGE		PHS Indian Health				
BE	MN	Govt	PONSFORD	11497	Center	1998			3,110

BE	MN	Govt	RED LAKE	11498	CHIEF LEADING FEATHER	1999	1994	Martell&Asso	82,902
	IVII	GOVI	INLD LAINL	11430	PHS Institutional	1333	1334	Martenaaso	02,302
BE	MN	Govt	WHITE EARTH	11499	Support Fac	1998			62,704
	1011 4		WITH E E/ ((CIT)	11100	PHS Indian Health	1000			02,701
ВІ	WY	Govt	ARAPAHOE	16181	Center	2003			17,407
			7		PHS Indian				,
ВІ	MT	Govt	BROWNING	11501	Hospital	2008	2001	DOE	260,060
			CROW		PHS Indian				
BI	MT	Govt	AGENCY	11502	Hospital	2003	1982	ROFEC	164,353
			FORT		PHS Institutional				
BI	WY	Govt	WASHAKIE	11556	Support Fac	2003	1994	Eng Services	31,489
					PHS Indian				
BI	MT	Govt	HARLEM	11503	Hospital-FT	2004			99,539
					PHS Indian Health				
BI	MT	Govt	HAYS	12665	Center	2004			30,979
					PHS Indian Health				
BI	MT	Govt	HEART BUTTE	16175	Center	2005	1982	ROFEC	9,002
					PHS Institutional				
BI	MT	Govt	LAME DEER	11504	Support Fac	2005	1982	ROFEC VIII	115,308
					Quarters		4004		40.040
ВІ	MT	Govt	LODGE GRASS	37556	Compound	2003	1994	Eng Services	13,616
		0.1	DODL AD	44505	PHS Institutional	0004			00.470
BI	MT	Govt	POPLAR	11505	Support Fac	2004			23,472
DI	NAT	C = 1.4	DDVOD	4.4070	PHS Indian Health	2002	4000	DOLLO	40.507
ВІ	MT	Govt	PRYOR	14673	Center	2003	1982	ROFEC	19,597
DI	N 4-	C = 1.4	DOCKY DOVC	10070	PHS Institutional	2005			10 111
BI	MT	Govi	ROCKY BOYS	12679	Support Fac PHS Indian Health	2005			13,441
ВІ	MT	Covet	WOLF POINT	20146	Center	2004			20.610
ы	IVII	Govi	WOLFFOINT	20140	IHS HEALTH	2004			20,610
ВІ	МТ	Govt	LODGE GRASS	03215	CLINIC & LAND	2000	100/	Eng Services	
וטו	IVII	GOVE	LODGE GIVAGO	03213	TRIBAL HEALTH	2000	1334	Ling Services	
ВІ	МТ	Tribe	POPLAR	BIFP1	CENTER		1983	ROFEC VIII	28,643
<u> </u>	1411	THE	I OI D'II		PHS Indian Health		1000	ROI EO VIII	20,040
NS	MS	Govt	CARTHAGE	32061	Station	2002			2,440
					PHS Indian				_,
NS	NC	Govt	CHEROKEE	11521	Hospital	2002	1986	Garratech	93,116
					NASHVILLE AREA				,
NS	NC	Govt	CHEROKEE	41222	YRTC	2002			13,331
					NASHVILLE AREA				
NS	NC	Govt	CHEROKEE	41223	ADMINISTRATION	2002			2,400
					PHS Institutional				
NS	MS	Govt	PHILADELPHIA	11500	Support Fac	2002			6,572
					PHS Indian				
NS	MS	Govt	PHILADELPHIA	32070	Hospital	2002	1986	Energy Services	58,048
					PHS Indian				
NV	ΑZ	Govt	CHINLE	11468	Hospital	1999	1979	HEMSLEY LEE	381,590
			CROWNPOINT		PHS Indian				
NV	NM	Govt	PUEB PINT	11511	Hospital	1997			210,919

NV	NM	Govt	CROWNPOINT PUEB PINT	11980	PHS Indian Health Station	1997			5,205
INV	INIVI	Govi	FUED FINI	11900	PHS Indian Health	1991			5,205
NV	AZ	Govt	DENNEHOTSO	15381	Station		1983	ROFEC IX	1,262
					PHS Indian Health				
NV	NM	Govt	FORT WINGATE	20399	Center	1999			7,656
					PHS Indian Medical	4000			224 - 42
NV	NM	Govt	GALLUP	11969	Center	1998			264,743
			00540514005		PHS Indian Health		40-0	50550 11/	
NV	AZ	Govt	GREASEWOOD	20393	Station		1979	ROFEC IX	2,526
<b>N</b> IV /	^ -		HOTEVILLA	40740	PHS Indian Health		4070	LIEMOLEVI EE	4 000
NV	AZ	Govt	DINNEBITO	19718	Station		1979	HEMSLEY LEE	1,262
NIV /	NIN 4	04	HUERFANO	05775	PHS Indian Health	4000			07.000
NV	NM	Govt	(NAGEEZI)	35775	Center	1999			37,306
NIV /	^ -	04	INSCRIPTION	05774	PHS Indian Health	4000			F0 00F
NV	AZ	Govt	HOUSE	35774	Center	1999			53,005
NIV/	^ 7	C = 1.4	IZ A V/FAIT A	11071	PHS Indian Health	4000	4070	LIEMOLEVIEE	04.040
NV	AZ	Govt	KAYENTA	11974	Center	1999	1979	HEMSLEY LEE	84,819
N IV /	^ -	04	MANY FARMS	40474	PHS Indian Health	4000	4070	LIEMOLEVI EE	00.400
NV	AZ	Govt	ROUGH ROCK	16171	Center	1999	1979	HEMSLEY LEE	29,436
NIV/	^ 7	Court	DINON	11076	PHS Indian Health	1000	1070	HEMOLEVIEE	6 727
NV	AZ	Govi	PINON	11976	Station	1999	1979	HEMSLEY LEE	6,737
NIV/	NINA	Court	CHIDDOCK	11517	PHS Institutional	1000			142 200
NV	NM	Govi	SHIPROCK	11517	Support Fac PHS Indian Health	1999			142,389
NV	^ 7	Court	TSAILE	27554		1000			E7 E 10
INV	AZ	Govi	ISAILE	37554	Center PHS Indian	1999			57,543
NV	AZ	Covet	TUBA CITY	11483		1998			<b>5</b> 22 277
INV	AZ	Govi	TUBA CITT	11403	Hospital PHS Institutional	1990			532,377
NV	AZ	Covet	WINDOW ROCK	11105	Support Fac		1002	ROFEC IX	E0 221
INV	AZ	Govi	WINDOW ROCK	11465	PHS Indian Health		1903	KOFEC IX	50,321
NV	AZ	Govet	WINSLOW	11486	Center	2000			48,982
INV	AZ	Govi	VVIINGLOVV	11400	PHS Indian Health	2000		2003 Audit from	40,902
OK	OK	Govet	ANADARKO	37552	Center	2003	1006	a DOE	20,000
OK	OK	Govi	ANADARRO	37332	PHS Indian	2003	1990	a DOE	20,000
OK	ОК	Govt	CLAREMORE	11528	Hospital	2003	1080	ROFEC IV	109,727
OK	OK	Govi	CLAILLIVIOIL	11320	PHS Indian	2003	1900	NOI LO IV	109,727
OK	ОК	Govt	CLINTON	11529	Hospital	2004	1085	FKW, Inc A&E	41,077
OK	OK	Govi	CLINTON	11323	PHS Indian School	2004	1900	I KVV, IIIC AQL	41,077
OK	KS	Govt	LAWRENCE	11493	Health Ctr	2004			16,992
OIX	110	Covi	LAWINLINGL	11433	PHS Indian	2004		2003 Audit from	10,002
OK	OK	Govt	LAWTON	11533	Hospital	2003	1005	a DOE	90,313
OIX	OIX	Covi	LAWTON	11000	PHS Indian Health	2000	1000	a DOL	30,313
OK	OK	Govt	PAWNEE	11534	Center		1996	OK Energy An	28,137
٠.٠	5.1	3071	. ,		PHS Institutional		.000	Livigy / III	20,107
OK	OK	Govt	TAHLEQUAH	11537	Support Fac	2003			9,410
٠.٠		2311			W W HASTING				3,110
OK	ОК	Govt	TAHLEQUAH	37553	HOSPITAL	2003	1995	OK Energy An	147,831
<u> </u>		2311		3.000	PHS Institutional		. 555	5. C = 1.0.gy 7.11	,001
OK	OK	Covt	TALIHINA	11536	Support Fac	1997	1985	CONSULTANT	157,730

OK	ОК	Govt	ADA	03352	CARL ALBERT INDIAN HOSPITAL		1985	FKW, Inc A&E	2,690
		Cove	/ CD/ C	00002	IHS INDIAN		1000	TIVV, IIIO AGE	2,000
ОК	OK	Govt	PAWHUSKA	03054	HEALTH CENTER		1985	FKW, Inc A&E	
					PHS Indian Health				
PH	AZ	Govt	CIBECUE	33113	Center		1983	ROFEC IX	13,100
			FORT		PHS Indian Health				
PH	UT	Govt	DUCHESNE	11550	Center	2001	2001	EME GROUP	28,616
					PHS Indian Health				
PH	AZ	Govt	LAVEEN	12676	Center	2006			2,900
<b>_</b>	<b>.</b>		MODERNALTE	00444	PHS Indian Health		4000	D0550 IV	0.500
PH	NV	Govt	MCDERMITT	33114	Center		1983	ROFEC IX	2,590
<b>_</b>	<b>.</b>		0140/1155	44507	PHS Indian	0004	0004	EME OBOUR	07.07.4
PH	NV	Govt	OWYHEE	11507	Hospital	2001	2001	EME GROUP	87,674
<b>D.</b> .	^ -		DADKED	44470	PHS Indian	0007	4000	DOFFO IV	400.000
PH	AZ	Govt	PARKER	11472	Hospital	2007	1982	ROFEC IX	130,029
Б	^ -	0 4	PEACH	44075	PHS Indian Health	0007			00.040
PH	AZ	Govt	SPRINGS	11975	Center Medical	2007			23,346
Б	^ -	0 4	DUOENIV	44470	PHS Indian Medical	0004	0004	EME ODOUD	074 044
PH	AZ	Govt	PHOENIX	11473	Center	2001	2001	EME GROUP	271,641
PH	AZ	Court	SACATON	11475	PHS Indian	2006			145 020
РП	AZ	Govi	SACATON	11475	Hospital	2006			145,020
PH	AZ	Covet	SACATON	41216	GILA RIVER YRTC	2006			20 561
FII	AZ	Govi	SACATON	41210	PHS Indian	2000			39,561
PH	AZ	Covt	SAN CARLOS	11477	Hospital	2001	2001	EME GROUP	92,963
ГΠ	AZ	Govi	SAN CARLOS	114//	PHS Indian Health	2001	2001	EIVIE GROUP	92,903
PH	AZ	Covt	SUPAI CANYON	27565	Station	2007			5,744
	72	Govi	SUP AT CANTON	37303	PHS Indian	2001			3,744
PH	AZ	Govt	WHITERIVER	11484	Hospital	2001	2001	EME GROUP	247,830
	72	GOVE	VVIIIILIXIVLIX	11404	PHS Indian	2001	2001	LIVIL GINOOI	247,030
PH	CA	Govt	WINTERHAVEN	11488	Hospital	2005	1082	ROFEC IX	21,766
	- C/ (	Cove	VIIIVIEIVIIIVVEIV	11400	PHS Indian Health	2000	1002	KOI LO IX	21,700
РО	WA	Govt	BELLINGHAM	37567	Center		1992	Contractor	792
-	1171		CHEMAWA	01001	PHS Indian Health		1002	Contractor	7.02
PO	OR	Govt	(Salem)	11540	Center	2003	1992	ES-S	23,124
	1		(Caioni)		PHS Indian Health				
PO	ID	Govt	FORT HALL	11491	Center	2003	1994	ES-S	31,076
					PHS Indian Health				01,010
PO	ID	Govt	LAPWAI	20944	Center		1997	ES-S	10,168
-	-				PHS Indian Health				,
PO	WA	Govt	NEAH BAY	30067	Center	2003	1996	ES-S	22,809
					PHS Indian Health				,,,,,,
PO	WA	Govt	NESPELEM	11551	Center	2006	1997	ES-S	24,410
					HEALING LODGE				<u> </u>
PO	WA	Govt	SPOKANE	41217	OF THE SEVEN	2005	1995	ES	31,000
		1			PHS Indian Health				,
PO	WA	Govt	TACOMA	35776	Center	2002	1992	ES-S	91,676
					PHS Indian Health				
РО	WA	Govt	TAHOLAH	20611	Center		1992	ES-S	10,883

PO	WA	Govt	TOPPENISH	19712	PHS Indian Health Center	2004	1994	ES-S	53,452
	1111				TULALIP DENTAL			Bldg	00, .02
РО	WA	Govt	TULALIP	37569	CLINIC	2003	1993	Manufacturer	1,960
			WARM		PHS Indian Health				
РО	OR	Govt	SPRINGS	11542	Center	2007	1997	ES-S	12,058
					PHS Indian Health			ES-S, New	
PO	WA	Govt	WELLPINIT	11553	Center	2010	2000	Const in 2000	26,024
			WARM		IHS IND HEALTH				
РО	OR	Govt	SPRINGS	03306	CENTER	2007	1997		
					MUCKLESHOOT			Bldg	
PO	WA	Tribe	AUBURN	37566	IHS DENTAL	2003	1993	Manufacturer	480
					MUCKLESHOOT				
РΟ	WA	Tribe	AUBURN	PO030	TRIBAL HEALTH	2050			45,332
					LUMMI BUSINESS				
РΟ	WA	Tribe	BELLINGHAM	PO300	COUNCIL	2004	1994		17,431
					CHILOQUIN IHS			Bldg	
РΟ	OR	Tribe	CHILOQUIN	41124	DENTAL CLINIC		1992	Manufacturer	1,800
					CHILOQUIN				
РО	OR	Tribe	CHILOQUIN	PO16A	TRIBAL HEALTH	2050			19,760
					COQUILLE TRIBAL				,
РО	OR	Tribe	COOS BAY	PO230	HEALTH CENTER	2050			15,079
					SQUAXIN ISLAND -				
РО	WA	Tribe	ELMA	PO08A	ELMA GRP HOME	2050			13,441
					NOOKSACK				,
РО	WA	Tribe	EVERSON	PO140	TRIBAL HEALTH	2050			10,813
					SHOSHONE-				
РО	ID	Tribe	FORT HALL	PO460	BANNOCK A/SA	2050			22,006
			GRANDE		GRAND RONDE				,
РО	OR	Tribe	RONDE	PO120	HEALTH CENTER	2050			30,552
					COLVILLE TRIBAL				,
РО	WA	Tribe	INCHELIUM	PO18A	HCTR-INCHELIUM	2050			26,534
					PORT GAMBLE				-,
РО	WA	Tribe	KINGSTON	PO050	HEALTH CENTER	2050			15,039
	1	11100	KLAMATH		KLAMATH FALLS				10,000
РО	OR	Tribe	FALLS	PO160	HEALTH ADMIN	2050			12,794
					SWINOMISH				
РО	WA	Tribe	LA CONNER	PO370	INDIAN SENATE	2050			10,899
	1	11100			NEZ PERCE A/SA				10,000
РО	ID	Tribe	LAPWAI	PO320	CENTER	2007	1997		25,382
		111100		. 5525	TULALIP TRIBAL				
РО	WA	Tribe	MARYSVILLE	PO470	HEALTH CENTER	2050			44,269
	117	11100	WWW. COVILLE		UMATILLA TRIBAL	2000			1 1,200
РО	OR	Tribe	PENDLETON	PO380	HEALTH CENTER	2050			26,948
		111100			BENEWAH TRIBAL				
РО	ID	Tribe	PLUMMER	PO190	HEALTH CENTER	2050			64,333
. •				. 5.00	PHS Indian Health			Bldg TX to Tribe	0 1,000
РО	WA	Trihe	QUEETS	20610	Station	0	Ω	2000	2,204
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PO	OR	Tribe	SILETZ	PO130	HEALTH CLINIC	2050			21,498
					PUYALLUP			Tacoma Light	
PO	WA	Tribe	TACOMA	PO450	TRIBAL HEALTH	2012	2002	and Power	39,093
					QUINAULT				
PO	WA	Tribe	TAHOLAH	PO330	MENTAL HEALTH	2050			28,869
			WARM		WARM SPRINGS				
PO	OR	Tribe	SPRINGS	PO220	TRIBAL A/SA CTR	2050			11,314
					PHS Tucson Area				
TU	ΑZ	Govt	SAN XAVIER	11479	Office	2004	1982	ROFEC IX	54,764
			SELLS SANTA		PHS Indian Health				
TU	ΑZ	Govt	ROSA	11478	Center	2004	1982	ROFEC IX	3,733
			SELLS SANTA		PHS Indian				
TU	ΑZ	Govt	ROSA	11482	Hospital	2004	1991	Harrington	150,761

## FY 2003 Annual Energy Implementation Report

## I. Management and Administration

- A. Energy Management Infrastructure
  - 1. Senior Agency Official: The senior Agency Official is the Director, Division of Facilities Operations. This person supervises the Agency's Energy Coordinator.
  - 2. The Agency Energy Team consists of 12 Area Offices (Aberdeen, Albuquerque, Alaska, Bemidji, Billings, California, Nashville, Navajo, Oklahoma, Portland, Phoenix, Tucson) and 2 Regional Offices (Engineering Service (ES)in Dallas and Seattle). The 12 Area Offices and 2 Engineering Services Offices each have a designated Energy Coordinator who is supervised by the Area Facility Engineers or ES Directors.
  - 3. Area Office Energy Program: Identify the structure of the Area's centralized energy program and how efforts are coordinated, facilitated, and information is disseminated. List special aspects of the program such as energy awareness campaigns, training, or other coordinated efforts to reduce energy and water consumption. If an Energy Team exists, list members of the team and describe the team's responsibilities. This may be the energy coordinator and direct coworkers or a group of facility managers.

#### **B.** Management Tools

- 1. Awards: Describe the Area's use of employee incentive programs to reward exceptional performance in implementing Executive Order 13123.
- Albuquerque -- Employees and Service Units will continue to be recognized for their efforts in implementing the executive order and for overall performance. The area director's awards program will also continue to be used as a tool for recognizing HF employees.
- 2. Performance Evaluations: Describe Area's efforts to include successful implementation of the requirements of Executive Order 13123 concerning the position descriptions and performance evaluations of senior energy officials, members of the OPDIV energy team, heads of field offices, and energy managers.
- Aberdeen -- The Area Office mechanical engineer is responsible for energy management activities as stated in his job description and it is part of his annual performance evaluation. This will continue in FY 2003.

Albuquerque -- The area will review the requirements to determine changes in future evaluations.

3. Training Education: Describe activities undertaken to ensure that all appropriate personnel receive training for energy management requirements. Describe Area outreach programs that include education, training, and promotion of Energy Star® and other energy efficient products for Federal purchase card users. Highlight specific training courses attended by Area personnel.

- Aberdeen -- Training and education for energy management will occur in FY 2003 in conjunction with the ESPC measurement and verification of energy reductions at Area facilities. The ESPC contractor, Johnson Controls Inc., will be investigating further energy savings opportunities at Area facilities for consideration.
- Albuquerque -- The area will continue to provide energy management sessions at the annual workshops. Individual training will continue to be provided as necessary.
- Tucson -- Training needs are re-assessed continually and training plans submitted annually. Specific courses included HVAC, appliance, and furnace servicing.
- 4. Showcase Facilities: Highlight exemplary new or existing facilities that HHS should consider for DOE Federal Energy Saver Showcase Facilities in FY 2000. Describe why the facilities should be considered Showcase Facilities (i.e., discuss the facility design, the improvements made in energy or water efficiency, the use of renewable energy, etc.).

Showcase facilities will be identified and recommended for recognition if applicable.

## III. Implementation Strategies

- A. Life-Cycle Cost Analysis. Outline procedures in place to ensure the use of life-cycle cost analysis in making investment decisions about in products, services, construction, and other projects to lower the Federal Government's costs and to reduce energy and water consumption. Highlight examples where life-cycle cost analysis was used in capital budgeting decisions concerning energy efficiency. Report on the successes and challenges of implementing life-cycle cost effective projects. (Under EPACT, energy conservation projects that will pay back investment costs within 10 years must be undertaken.)
- Aberdeen -- The ESPC included energy savings projects at nine Area facilities. These projects have been analyzed and included in the ESPC to save energy with excellent pay back times.
- Alaska -- Life cycle cost analysis is a required element for evaluation of all potential energy projects or ECM's. The 10-year simple payback is a go no-go decision tool and the Life cycle cost is used to prioritize the best use of funding. THE AHFAC funding criteria requires this method of project evaluation prior to releasing funds for an energy project.
- Albuquerque -- Life cycle cost analysis has been used on major projects. A majority of the smaller projects have included requirements for energy efficient equipment and components.
- Tucson -- Tucson Area is in the process of having a facilities condition assessment conducted. The assessment will aid in capital budgeting decisions with respect to life-cycle cost.
- B. Facility Energy Audits: See Attachment E The IHS Energy Audit Trail, for a detailed listing of the facilities audit plan.
- C. Financing Mechanisms. Provide narrative information related to the use of Energy-Savings Performance Contracts (ESPCs) and Utility Energy Services Contracts (UESCs). Describe all contracts signed, in process, or under investigation and the projects planned for completion.

# Report funding requested and received for FY 2000 and funding requested for FY 2001 for the performance of energy surveys/audits and for applied energy conservation measures.

- Aberdeen -- The Area ESPC with Johnson Controls Inc. is a 15 year contract beginning on October 1, 1001. The initial first year investment by Johnson Controls Inc. is nearly \$2,000,000 to upgrade HVAC equipment and control systems at six locations and lighting retrofits at nine locations. The energy savings at these locations is estimated at 23%.
- Oklahoma City -- We plan to use the DOE Super ESPC contract in FY03 for 2 I.H.S. hospitals and 4 Cherokee Nation health centers.
- Tucson -- The Tucson Area applied for joint funding from the DOE for an energy audit. The proposal was denied due to lack of funding. Other means of additional funding will be investigated.
- D. Energy Star® and Other Energy-Efficient Products. Describe steps taken to promote the purchase of Energy Star® products and/or products that are in the upper 25 percent of energy efficiency as designated by FEMP. Note whether energy efficient criteria have been incorporated into all guide specifications and product specifications developed for new construction and renovation. Also note whether such criteria have been incorporated into product specification language. (See the Energy Star® products and "green" products web sites by GSA [www.fss.gsa.gov/environ], DOE www.eren.doe.gov/femp/procurement/begin.html]
- Alaska -- ANTHC engineers work with the RHO's Facility managers to evaluate project specifications and purchases to insure the most energy efficient models are considered in the procurement process.
- Albuquerque -- The area will continue to encourage all staff to consider energy efficiency when procuring and specifying products for construction and renovation.
- Phoenix -- With all new projects, procurement of Energy Star and other energy efficient products are incorporated into specifications.
- Tucson -- Energy Star products are reviewed for all maintenance and project activities.
- E. Energy Star® Buildings. Report the number and percentage of buildings that have met the Energy Star® Building criteria and have officially been designated Energy Star® Buildings. (Buildings must rank in the top 25 percent in energy efficiency relative to comparable commercial and Federal buildings to be eligible for the Energy Star® Buildings designation. See <a href="https://www.epa.gov/buildings/label">www.epa.gov/buildings/label</a>.)
- Albuquerque -- The area will provide further data for the Albuquerque Indian Hospital to determine its eligibility for designation as an energy star building.
- Tucson -- The Sells Hospital scored an 85 on the EPA Energy Star Building scoring system. A designation has been requested. Other buildings will be reviewed for submission.
- F. Sustainable Building Design. Report whether sustainable building design principles have been incorporated into the siting, design, and construction of new facilities. (See <a href="www.wbdg.org">www.wbdg.org</a> for a description of sustainable building design principles.)

- Aberdeen -- Sustainable building design principles will be considered for future new buildings.
- Albuquerque -- Staff will be encouraged to utilize all applicable guidelines and principles regarding energy efficiency into the siting, design, and construction of new facilities.
- Oklahoma City -- We are advocating in FY03 for compliance with ASHRAE/IENSA Standard 90.1-1999 (Energy Standard for Buildings Except Low-Rise Residential Buildings) and it's Addendum J which took effect Oct. 29, 2001.
- Tucson -- Sustainable design principles are applied to a projects to include renovations and new construction.
- G. Energy Efficiency in Lease Provisions. Describe how energy and water efficiency are considered when OPDIVs enter into new leases or renegotiate/extend existing leases (e.g., preference for buildings with sustainable design and development, preference for certified Energy Star® Buildings, etc.).
- Albuquerque -- Energy and water efficiency will continue to be considered when renegotiating or extending leases.
- H. Energy-Intensive Facility Efficiency Improvements. Highlight activities undertaken to explore efficiency opportunities in energy-intensive facilities. This may include activity in the following areas: steam systems, boiler operation, air compressor systems, industrial processes, fuel switching, cogeneration, and other efficiency and renewable energy technologies.
- Aberdeen -- Energy efficiency opportunities will be considered in all related construction projects and equipment replacements beginning in FY 2002. The ESPC contractor will also be researching energy efficiency opportunities for consideration.
- Albuquerque -- The service units will be encouraged to explore projects for energy efficiency versus routine repairs/preventive maintenance and to coordinate those opportunities with the area.
- I. Highly Efficient Systems. Describe new construction and/or retrofit projects for which combined cooling, heating, and power systems were installed. Report whether local natural resources were surveyed to optimize use of available biomass, geothermal, or other naturally occurring energy sources.
- Alaska -- A ground water cooling project is currently in construction for the Alaska Native Medical Center in Anchorage. A test well verified flow rates. Construction has moved forward and project permitting is complete. This project is anticipated to be complete and operational FY03.
- Albuquerque -- Projects to improve the efficiency of existing systems will continue to be pursued.
- J. Off-Grid Generation. Describe the installation of new solar hot water, solar electric, solar outdoor lighting, small wind turbines, fuel cells, and other off-grid alternatives.

Alaska -- YKHC is pursuing a feasibility study for a wind turbine application at the Bethel Hospital and and other Yukon Delta community clinics. ANTHC Area Energy Coordinator is assisting in the technical and economic analysis and planning for anticipated project(s).

Albuquerque -- Will continue to take advantage of alternative systems where applicable.

# K. Renewable Energy Purchases. Describe agency plans to encourage the purchase of electricity and thermal energy generated from renewable sources.

No information to report.

- L. Electrical Load Reduction Measures. Describe your plans for electrical load reduction that will be taken during power emergencies to cut electricity consumption its buildings and facilities.
- Alaska -- Most facilities in Alaska have automatic load management systems to address load reduction during electrical outages/emergencies. Specific measures were implemented at ANMC to reduce non-essential loads to further reduce the peak load of the facility. Similar techniques were accomplished at other hospital locations as well. The DDC systems assist with non-emergency load management also.
- Albuquerque -- The area will assist the service units during emergencies. Service unit plans will be reviewed to ensure appropriateness and update as needed.
- Oklahoma City -- We plan to investigate opportunities for this prior to the FY03 cooling season.
- Phoenix -- The area office will alert all service units within the area when energy reduction is needed. The service units will load the emergency generators, adjust thermostats, shut down all unnecessary and nonessential equipments, turn off lights, etc.
- M. Water Conservation. Highlight activities undertaken to improve water efficiency. Discuss progress in developing and implementing Water Management Plans for efficient use of water.
- Alaska -- Energy audits recently conducted at six of the seven hospitals identified energy conservation measures (ECM's) to include addressing water conservation. ECM's are then bundled together with other projects and accomplished.
- Albuquerque -- Will perform assessment and work with the service units to determine possible projects and improvements.
- Tucson -- The facilities are replacing outdated toilets, faucets, showerheads and other devices with water saving products. The facilities are reviewing watering schedules and desert landscaping to reduce water consumption.